

In the Specification:

Please amend the specification by substituting the paragraphs indicated. Paragraph numbers are those published in the published application.

[0016] ~~DESCRIPTION OF THE SPECIFIC EMBODIMENTS~~ The subject compounds are ~~N-(4-X-3-(trifluoromethyl)phenyl)-2-hydroxy-2-methyl-3-(perfluoroacetyl amino)propionamides~~ N-(4-X-3-(trifluoromethyl)phenyl)-2-hydroxy-2-methyl-3-(perfluoroacetyl amino)propionamides, where X is nitro, cyano or halogen of atomic number 9-35 9-35, particularly chlorine and the perfluoroacetyl group is of from 2 to 3 carbon atoms and 0 to 0-1 hydrogen atom. Preferably X is nitro and the perfluoroacetyl group has 0 hydrogen atoms.

[0030] *Example 1: 4-nitro-3-trifluoromethyl-N-(2-hydroxy-2-methyl-3-amino (BP-34)* A pressure reactor was charged with 4-nitro-3-trifluoromethyl-N-[2,3-epoxy-2-methyl propionyl]aniline, (prepared according to EPA 100, 172) (10.0 g, 34.46 mmol) and methanol (100 ml). After cooling to -70 C, ammonia in excess was condensed into the reactor which was sealed and stirred for 14 hours. Following evaporation, the crude solid was washed with cold dichloromethane (50 ml). Filtration and drying gave 6.1 g PG-34 (58% yield). Melting point: ~~+42-145~~ 142-145 C.

[0032] ¹H NMR (DMSO-d₆, 500 MHz): δ 10.56 (s, ArNHC(O)); δ 9.31 t, NHC(O)CF₃. ¹⁹F NMR (DMSO-d₆, 470 ~~MHZ~~ MHZ): δ -58.4 (s1 ArCF₃ ArCF₃); δ -73.4 (s1 C(O)CF₃). Mass spec (m/z): 426 (M+Na⁺).

[0036] ~~¹Resveratrol~~ ¹Resveratrol in this assay had a negligible effect on AR, at 10 ~~μM~~ μM conc. About 46% AR remained. When cells were incubated together with 3 μM Resveratrol/BP-766, (1:1), the combined effect was about twice as great as with BP-766 alone, after 16 hrs incubation, suggesting synergy of such combination. ²AstraZeneca.

[0037] ~~²AstraZeneca~~ The systemic antiandrogens hydroxyflutamide and bicalutamide, did not affect the androgenic receptors significantly at any concentration after 48 hrs., while BP-766 suppressed androgenic receptors at 3 μM concentration within 16 hrs. and practically eliminated the androgenic receptors at 10 μM

concentration by 48 hours. BP-34, the aromatic product of degradation of BP-766, had no effect on the androgenic receptors.

[0051] *Example 10: BP-766 in the treatment of androgenic hair effluvium and alopecia:* In six volunteers with incipient androgenic effluvium and/or alopecia, BP-766 was applied on the scalp (behind the hair-thinning line) as a 2% solution in anhydrous isopropanol, 1 ml, twice daily (0.6 mg/kg) for a period of 8 weeks; no dermal irritation was seen in any of the volunteers. BP-766 arrested the effluvium of the frontal hairline in all six volunteers after 2 weeks. After 4 months use, by two volunteers, an evident regrowth was observed. Four volunteers also employed Minoxidil as an admixture, in a 2% concentration, with similar results. ~~EndOfInsertB~~~~EndOfInsertB~~

[New Paragraph Number Please] *Example 11: 2,2,3,3,3-pentafluoro-N-(2-hydroxy-(n-(4-nitro-3-(trifluoromethyl)phenyl)carbamoyl)propyl)propanamide. (BP-780).* BP-34 (35.4 g, 0.115 mol), tetrahydrofuran (140 ml), and triethylamine (17.7 ml, 0.127 mol) were stirred at 5°C. Pentafluoropropionic anhydride (39.3 g, 0.127 mol) was added and stirred for 2 hours at room temperature. After solvent removal, the product was dissolved in ethyl acetate (250 ml) and washed with H₂O (250 ml) and 0.1 N HCl (250 ml). After treatment with MgSO₄, the solvent was evaporated and the residue crystallized from ethyl acetate. (50% yield).

[0053] ~~InsertB~~ This novel suppressor of cutaneous androgen receptors described herein offers a sound therapeutic concept for treatment of androgenic effluvium and alopecia, applicable to both males and females. ~~InsertB~~ Although the foregoing invention has been described in some detail by way of illustration and examples for purposes of clarity of understanding, it will be obvious that certain changes and modifications may be practiced within the scope of the appended claims. All references cited herein are incorporated herein by reference, as if set forth in their entirety.